

HUAWEI Luna2000

Battery Installation



Topics

- 1. Unpacking**
- 2. Mechanical installation**
- 3. Electrical installation**
- 4. Commissioning / settings**

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- 1. Unpacking**
2. Mechanical installation
3. Electrical installation
4. Commissioning / settings



Items:

1. Power module

Always on top of each battery stack.

Max 3 batteries per PowerModule.

Output power max. 5kW (min 2 Batteries)



Items:

2. Battery module

Max 3 batteries per PowerModule.



Topics

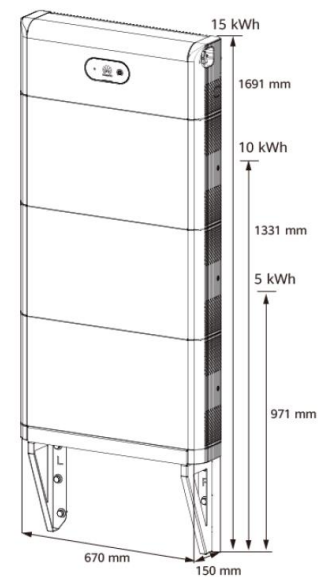
1. Unpacking
- 2. Mechanical installation**
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4. Commissioning / settings

1. Floor support

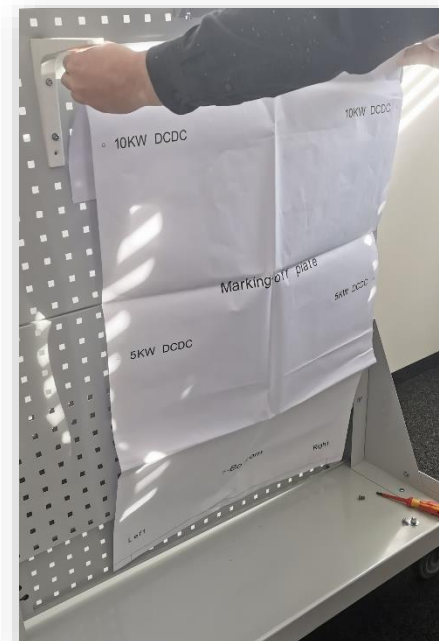
Place floor support



Example installation: on laboratory metal wall.



Wall mounting
(wall mount support not included!)



Mark wall holes with template

Fixing floor support to the ground.
Alternatively wall mounting possible (wall mount support not included!)

2. Place battery 1



Example installation: on laboratory metal wall.



Correct placing on buttons



Fix battery to floor support left + right

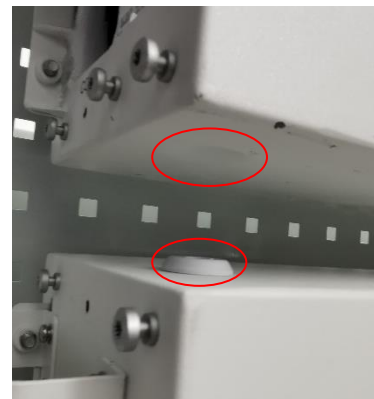
3. Place battery 2



Example installation: on laboratory metal wall.



Max. 3 Batteries pr power module possible



Correct placing on buttons



Fix 2nd battery to 1st battery left + right

4. Place power module



Example installation: on laboratory metal wall.



Max. 3 Batteries per power module possible



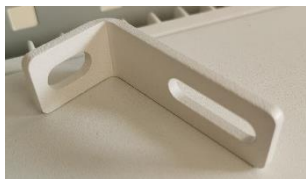
Correct placing on buttons



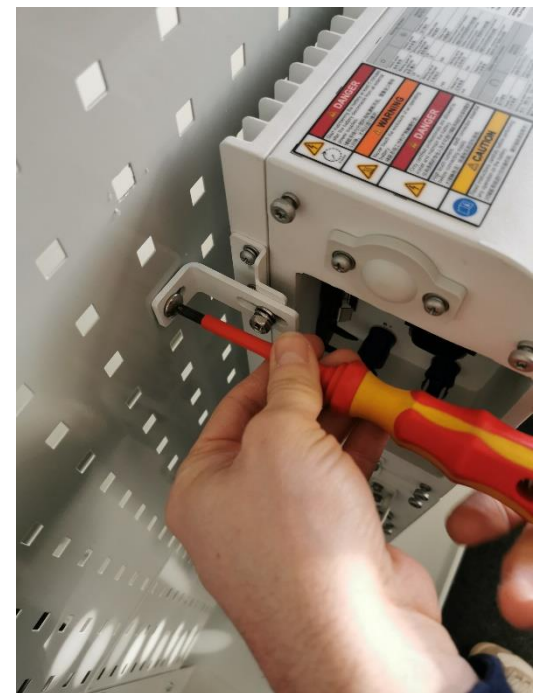
Fix power module to top battery
left + right

4. Fixing on wall

Fix power module and batteries on wall with wall bracket left and right side



Wall brackets
(included)





Example installation: on laboratory metal wall.

Topics

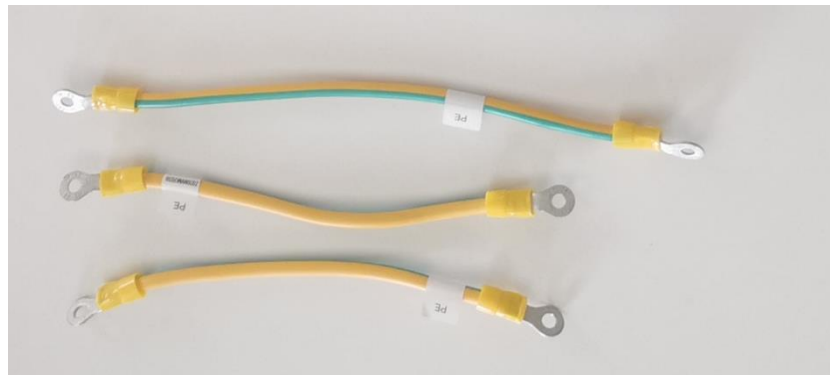
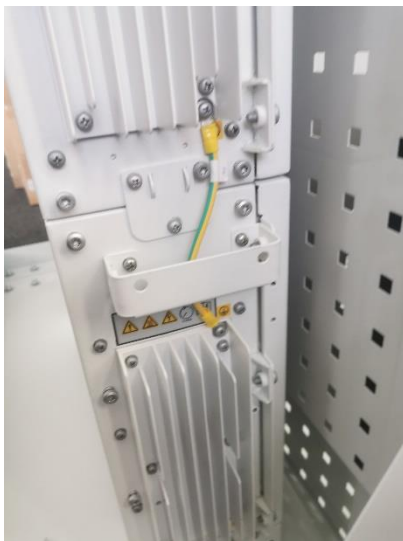
1. Unpacking
2. Mechanical installation
- 3. Electrical installation**
4. Commissioning / settings



1. Grounding interconnection

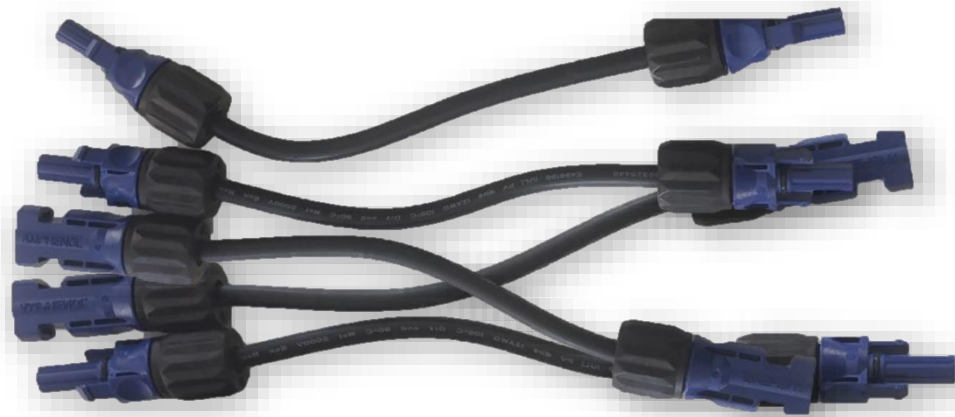
On right hand side connect all batteries and power module with ground cable (included)

Longest cable is for power module to battery on top.



2. DC-cable interconnection

On left hand side connect all batteries and the power module with DC-cables plus and minus (included)

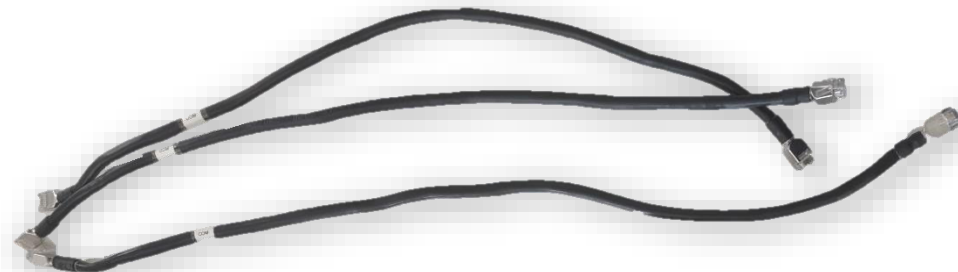


Example installation: on laboratory metal wall.

3. communication interconnection

On left hand side connect all batteries and power module with the communication cable (included)

Longest cable is for power module to battery on top.



1. First plug in RJ45 plug(s)
2. Install plastic cover
3. Move seal and fix it with cap (hint: use oil-free silicone grease for easier installation of rubber seal)



Example installation on laboratory metal wall.



IP66 cover with rubber seal for RJ45 plugs

4. External grounding

Ground battery with 10mm² to external ground.

External ground cable not included.



external ground connection



Example installation: on laboratory metal wall.

5. DC-connection battery to inverter

Prepare DC cable 4..6mm² plus and minus for inverter connection.
DC-cable for inverter connection not included. Use **Staubli MC4** plugs delivered. Plug in plus and minus power module to inverter.



Example installation: on laboratory metal wall.



2x male for minus cable and 2x female for plus cable



Power module connectors



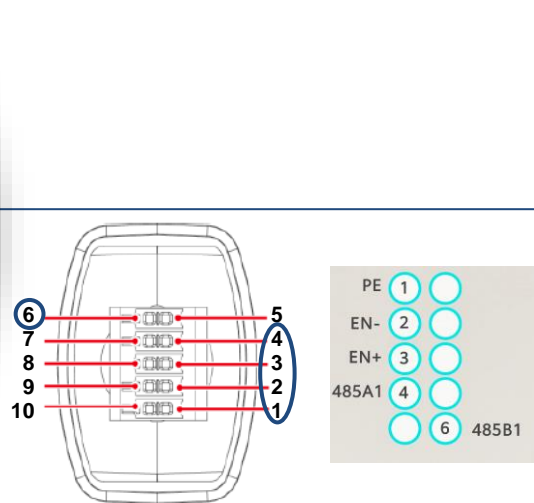
Inverter Battery connectors

6. communication battery to inverter

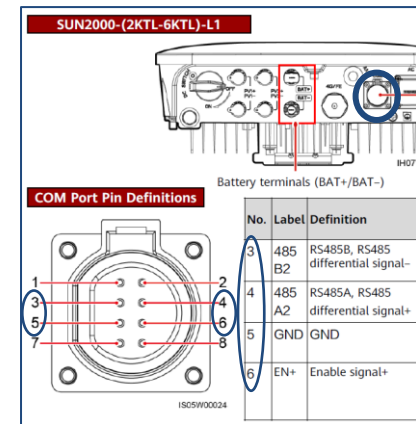
Prepare communication cable min 4 wires twisted-pair for inverter connection. Cable length $\leq 10\text{m}$.



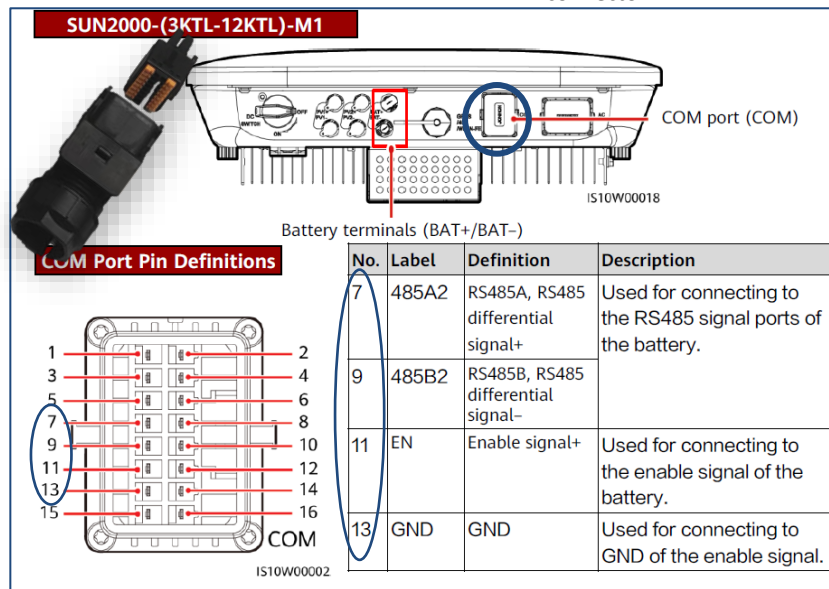
Example installation: on laboratory metal wall.



Power module communication connector



Inverter 2..6KTL-L1 communication connector



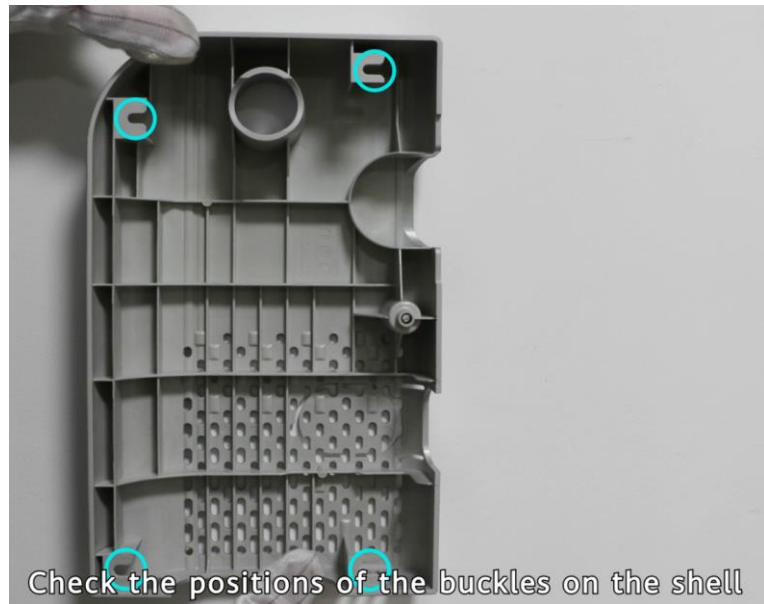
Inverter 3..10KTL-M1 communication connector

7. Installing covers

Slide on the covers right and left of batteries, power module and ground support. Fix the covers with the attached screw.



Example installation: on laboratory metal wall.



Check the positions of the buckles on the shell

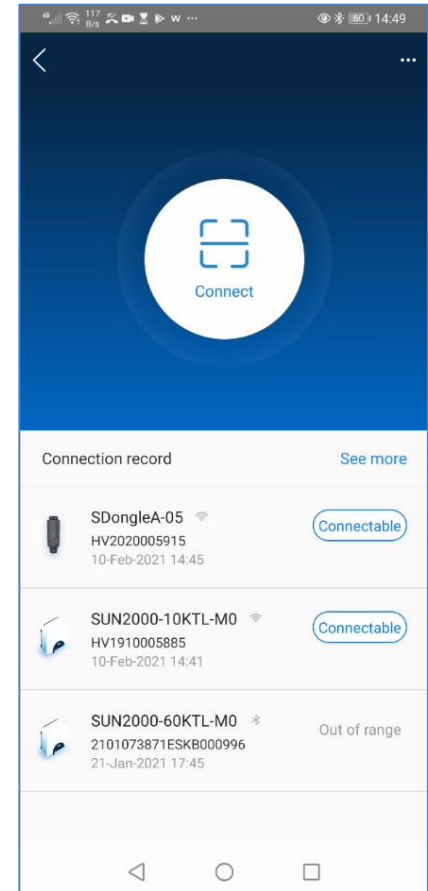
8. Verifying the installation

Checklist:

1. The battery is installed correctly and securely.
2. The cables are routes properly as required by the customer.
3. Cable ties are secured evenly and no burr exists.
4. The ground cable is connected correctly and securely.
5. The DC switch and all switches connected to the battery are OFF.
6. The AC output power cable, DC input power cable, battery cable and signal cable are connected correctly, securely and reliably.
7. Unused terminals and ports are locked by watertight caps.
8. The installation space is proper, and the installation environment is clean and tidy.

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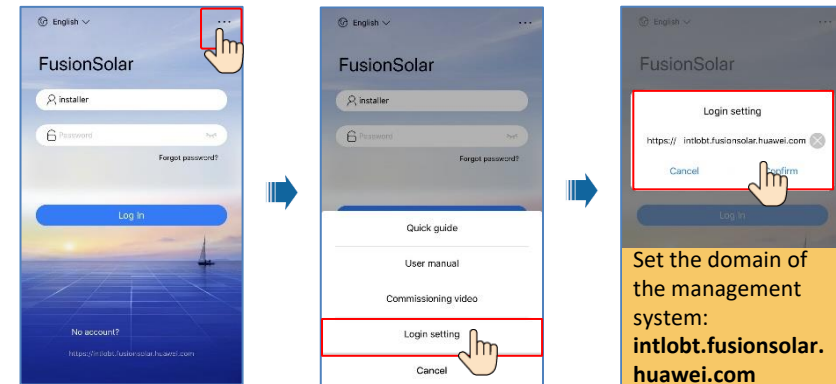


App FusionSolar7

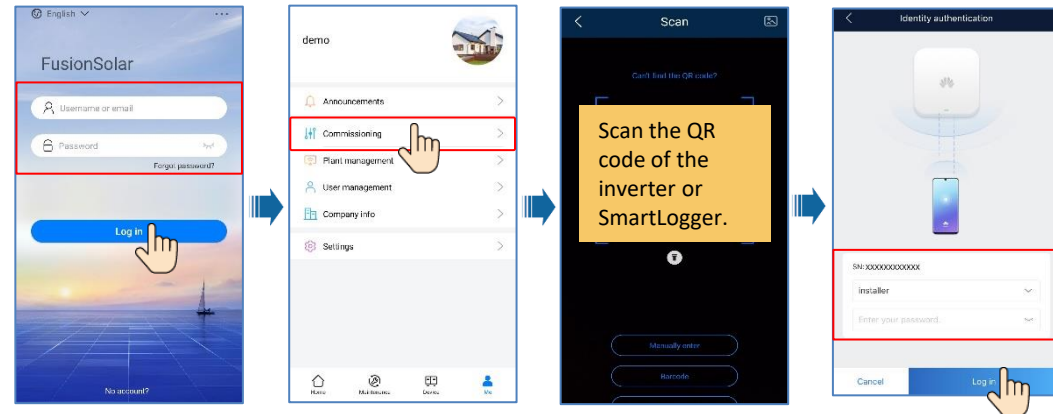
1. Download FusionSolar7 APP of the latest version (the blue icon) here:
<https://intlobt.fusionsolar.huawei.com/fusionsolarapp> (or in ,Huawei App Gallery')



2. Before you log in to the FusionSolar app, you need to **set the domain name** of the management system to <https://intlobt.fusionsolar.huawei.com> . (this is a temporal server - plants will be automatically transferred to intl.fusionsolar.huawei.com in April)



3. **Login to inverter** with FusionSolar Comissioning App as 'Installer' user

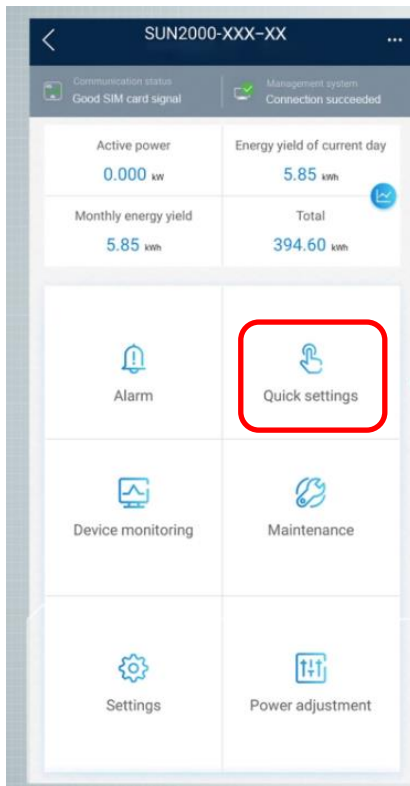


Quick Settings

Commissioning in 5 steps.

Initial password inverter in App: 00000a

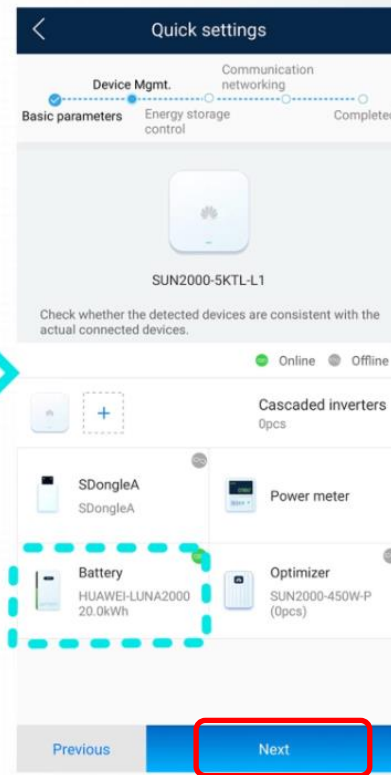
1. Start page



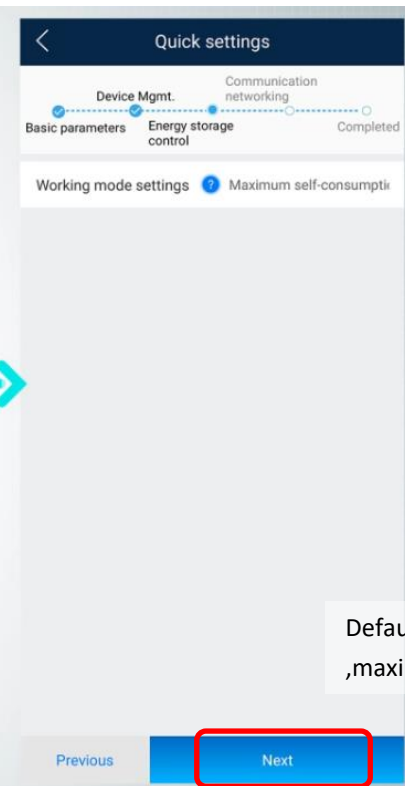
2. Quick settings



3. Battery discovered automatically



4. Set working mode



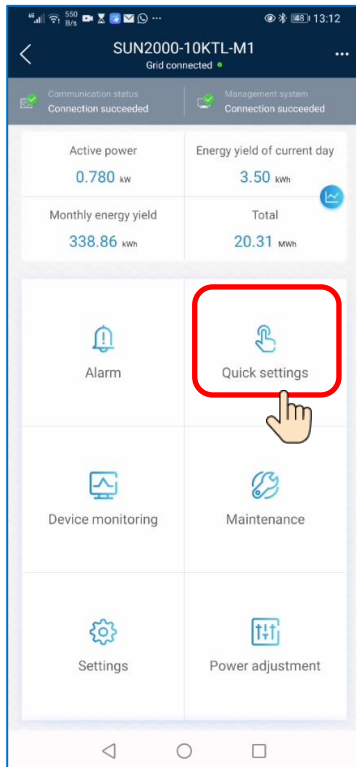
Default working mode:
,maximal self-consumption'

Quick Settings

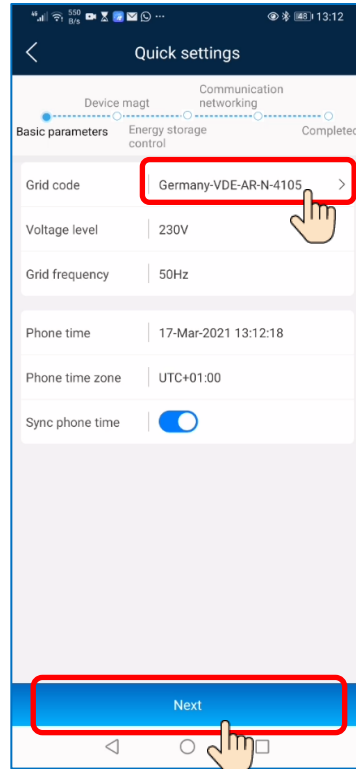
Commissioning in 5 steps.

Initial password inverter in App: 00000a

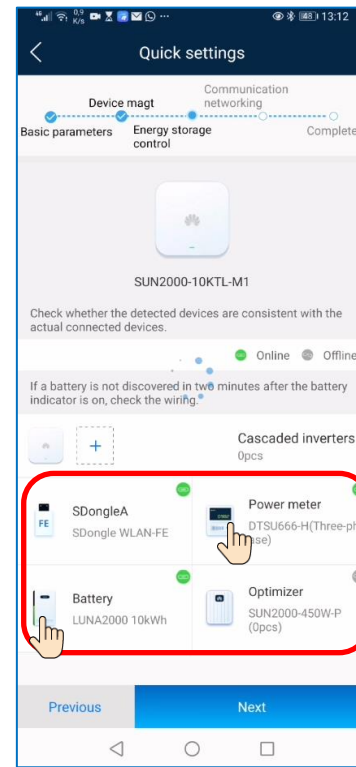
Start page



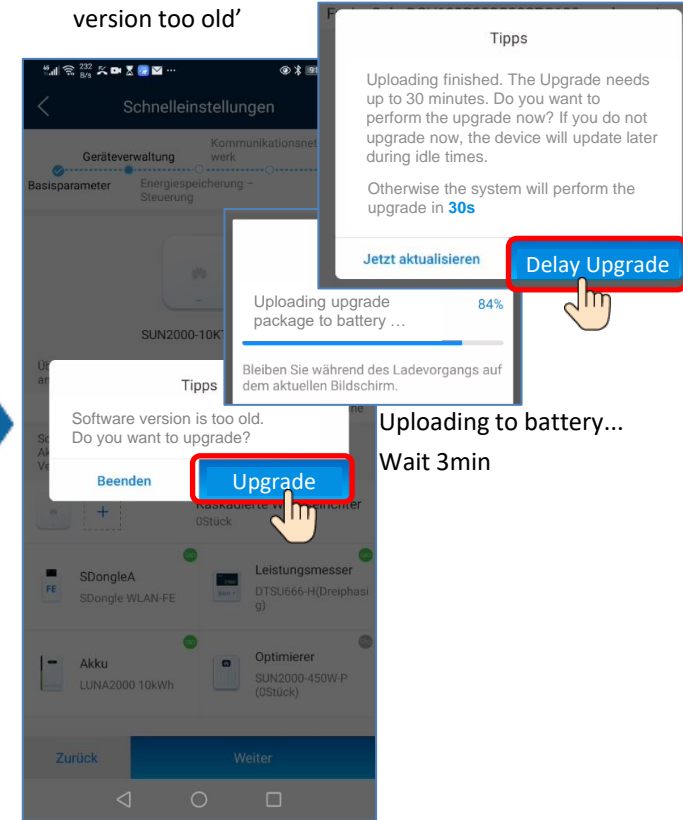
1. Quick settings
(starts automatically after logging in during new start-ups)



3a. Automatic device discovery



→ Often necessary, the battery update is automatically requested due to 'software version too old'



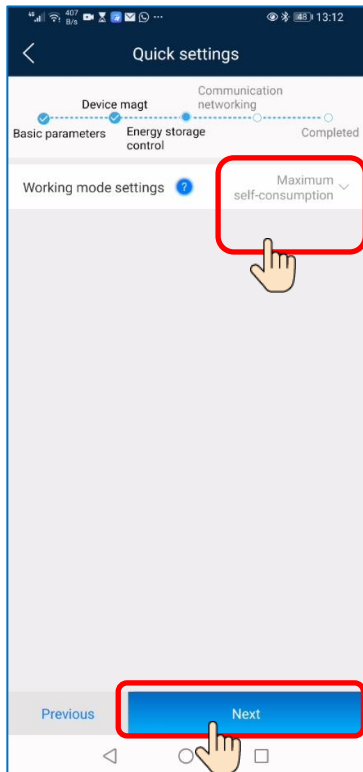
With 'Delay Upgrade', the upgrade is delayed by 3h after logout. Otherwise after 30s battery update starts automatically. Update time approx. 45min!!

Quick Settings

Commissioning in 5 steps.

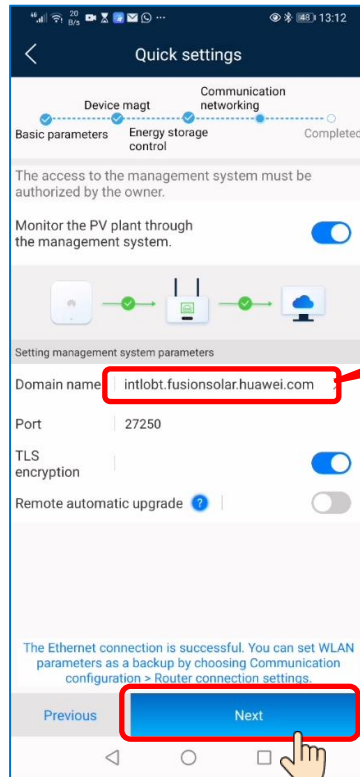
Initial password inverter in App: 00000a

3b. Set working mode



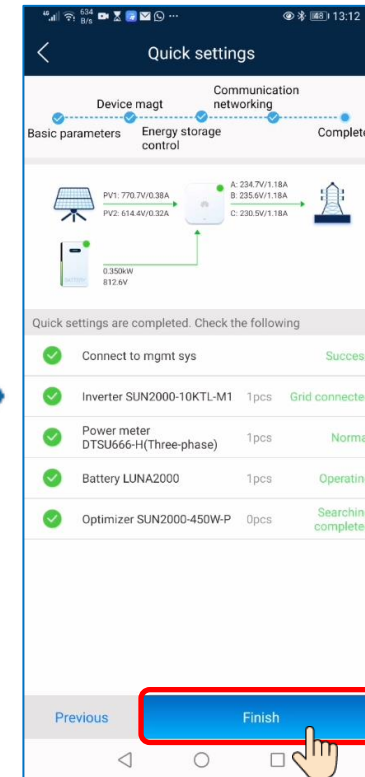
Default setting: 'maximum consumption'.

4. Connect to



Currently, make sure that the temporary server is set here:
intlobt.fusionsolar.huawei.com

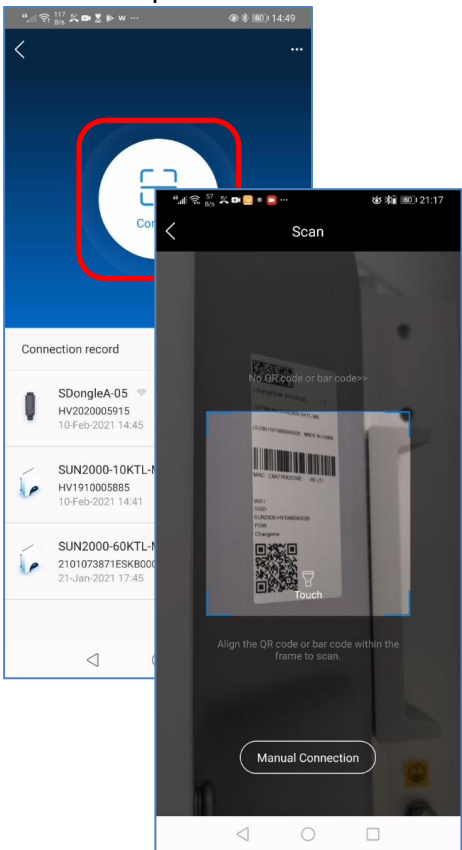
5. Finished



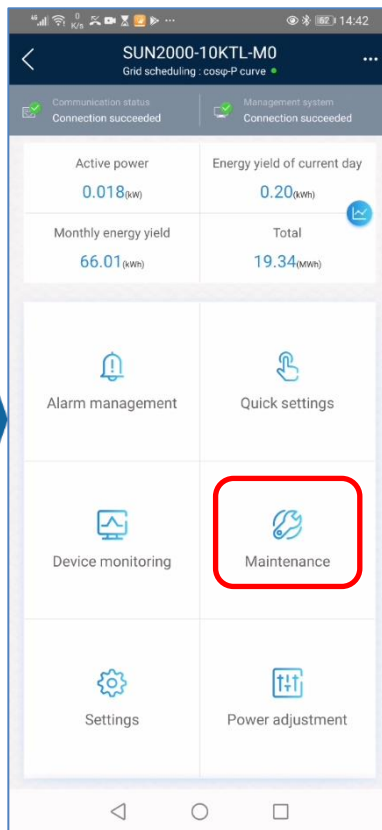
Update Inverter + Luna Battery

1. Login to inverter WiFi

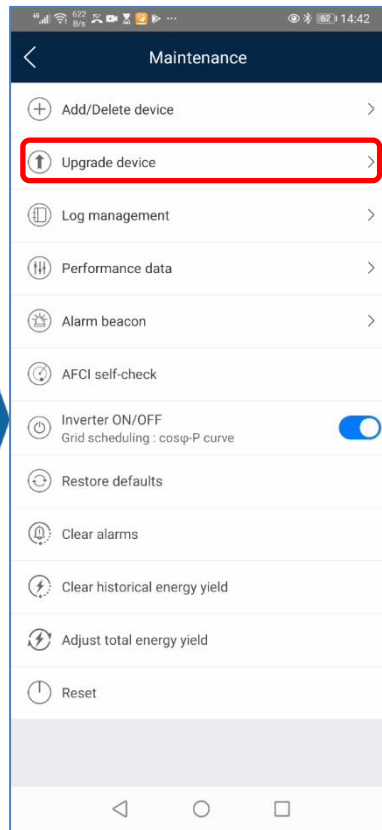
Initial password: 00000a



2. Choose 'Maintenance'

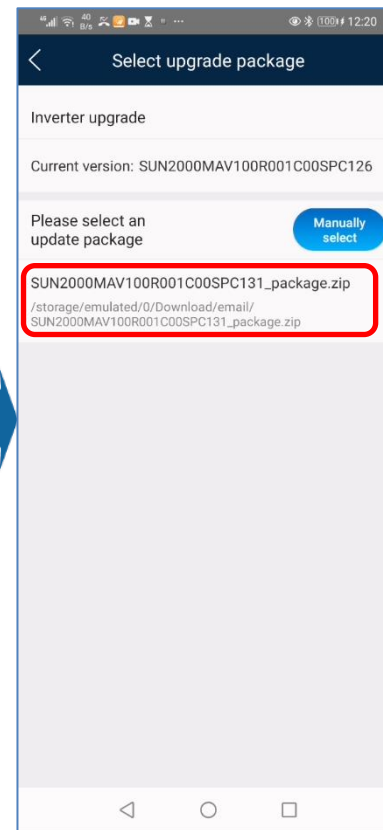


3. Choose 'Upgrade device'



4a. Choose 'Inverter upgrade'

4b. Choose 'Battery upgrade'



Minimum needed inverter firmware for LUNA2000:

- 3...10KTL-M0: (coming Q2/2021)
- 3.. 10KTL-M1: V100R001C00SPC131
- 2.. 6KTL-L1: V200R001C00SPC106

Upgrade time inverter: ~15min

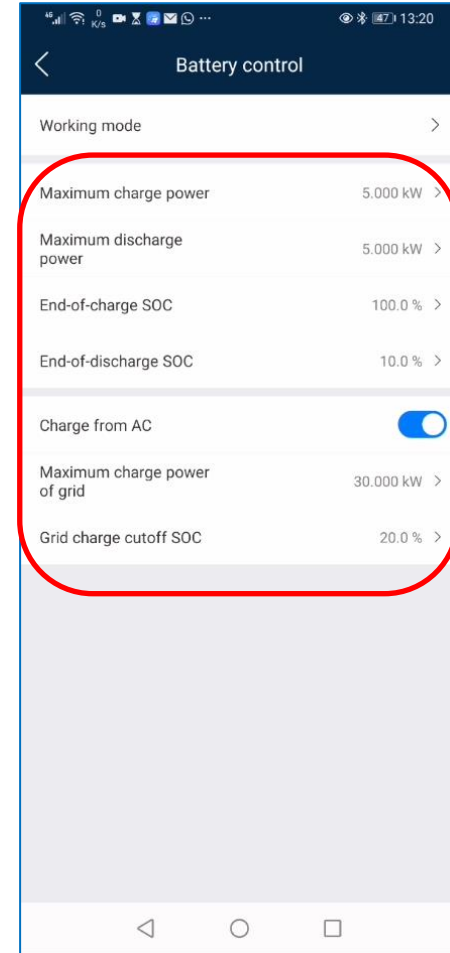
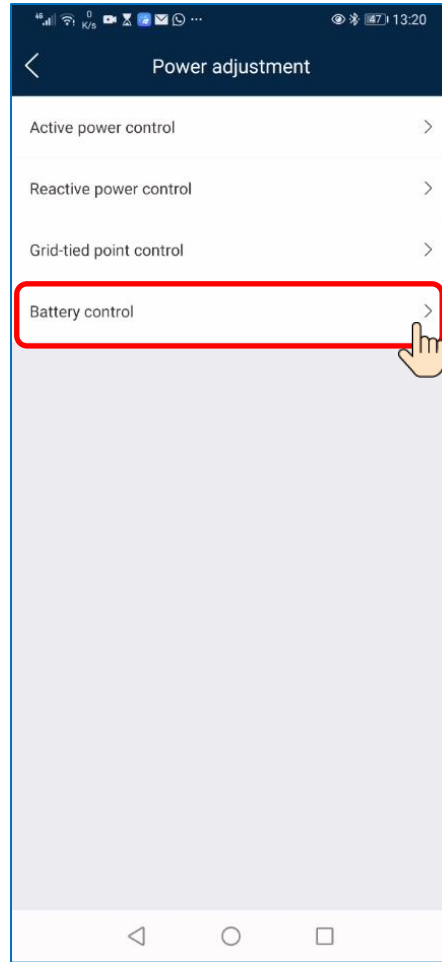
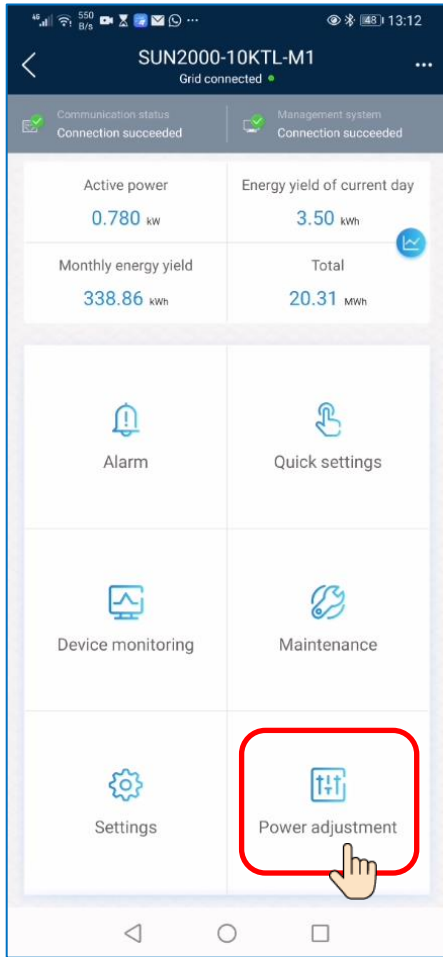
Always update to actual Luna Battery firmware:

- System commissioning possible without Luna update.
- Please **always** start Luna update to actual firmware.
- Firmware update for Luna needs several hours. Therefore Luna firmware update will be automatically delayed for 3 hours (so customer will experience at first night a longer battery update period).

Upgrade time battery: ~45min

Battery parameter settings

Battery parameter setting:



Note:

With 'Charge from AC', the battery will always stay at the lower SOC limit (here: 10%). Even after a longer time of little or no irradiation (e.g. winter) the battery will stay at lowest SOC level.

If you have any questions please contact us!

contact:

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